

**PROPOSED DECISION**

Agenda ID #12963 (Rev. 1)

Ratesetting

6/12/2014 Item 18

Decision **PROPOSED DECISION OF ALJ BUSHEY** (Mailed 4/25/2014)

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking on the  
Commission's Own Motion to Adopt New  
Safety and Reliability Regulations for  
Natural Gas Transmission and  
Distribution Pipelines and Related  
Ratemaking Mechanisms.

Rulemaking 11-02-019  
(Filed February 24, 2011)

**DECISION DECLINING TO STAY DECISIONS AUTHORIZING INCREASED  
OPERATING PRESSURE**

**Table of Contents**

<b>Title</b>	<b>Page</b>
DECISION DECLINING TO STAY DECISIONS AUTHORIZING INCREASED OPERATING PRESSURE .....	1
1. Summary .....	2
2. Background.....	2
2.1. The Procedural Part of the OSC .....	6
2.2. Positions of the Parties .....	7
2.2.1. Office of Ratepayer Advocates (ORA) .....	7
2.2.2. The Utility Reform Network (TURN) .....	8
2.2.3. City of San Bruno .....	9
2.2.4. City and County of San Francisco .....	9
2.2.5. PG&E.....	10
3. Discussion .....	11
4. Comments on Proposed Decision .....	16
5. Assignment of Proceeding .....	17
Findings of Fact.....	17
Conclusions of Law .....	18
ORDER .....	18

**DECISION DECLINING TO STAY DECISIONS AUTHORIZING INCREASED  
OPERATING PRESSURE****1. Summary**

This decision finds that Pacific Gas and Electric Company has pressure tested Lines 101, 132A, Lines 131-30, and the Topock Compressor Station in compliance with Decision 11-09-006 and that the Commission decisions lifting operating pressure restrictions on these Lines need not be suspended. This portion of this rulemaking proceeding is closed.

**2. Background**

Following the 2010 natural gas system tragedy in San Bruno, this Commission ordered Pacific Gas and Electric Company (PG&E) to reduce operating pressure on certain of PG&E's natural gas transmission pipelines. In Decision (D.) 11-09-006, the Commission set forth the specific requirements for PG&E to demonstrate that the operating pressure restrictions could be safely removed, and adopted an expedited process to determine whether PG&E had demonstrated that the pipelines could be safely operated at the originally established maximum allowable operating pressure (MAOP).

The Commission required PG&E to show that the lines had been properly pressure tested and that PG&E's responsible engineer had reviewed of the pipeline construction and assessed of the pressure test results. The Commission ordered PG&E to present the following Supporting Information on each request to remove an operating pressure limitation:

**Supporting Information for Request to Lift Operating Pressure Limitation**

- A. Name/Number of Segment, general description, location, length of segment, and percent specified minimum yield strength at MAOP.
- B. MOP [Maximum Operating Pressure] and MAOP for each segment and the entire Line prior to the pressure reduction.
- C. Reason for MAOP reduction.
- D. Complete Pressure Test Results for each segment in Class 3 or Class 4 locations or Class 1 or Class 2 High Consequence Areas where MAOP will be restored. Explain findings and any actions taken based on results of pressure testing.
- E. MAOP validation records for non-HCA segments where MAOP will be restored.
- F. Proposed MOP and MAOP for each segment and the entire Line and proposed effective date.
- G. Safety Certification. Verified statement from the PG&E officer responsible for gas system engineering that:
  - a. PG&E has validated pipeline engineering and construction;
  - b. PG&E has reviewed pressure test results and can confirm that a strength test was performed on the segment in accord with 49 CFR Part 192, subpart J, or the regulations in effect at the time the pressure test was performed; and
  - c. in the professional judgment of the engineering officer, the system is safe to operate at the proposed MAOP.
- H. Concurrence of the Commission's Consumer Protection and Safety Division.

In D.11-10-010, the Commission applied these standards and authorized PG&E restore the MAOP of the suction side of the Topock Compressor Station to

660 pounds per square inch gauge (psig). Similarly, the Commission authorized PG&E to increase the maximum allowable operating pressure on natural gas transmission Line 131-30 and associated shorts to 595 pounds psig (D.12-09-003).

On December 15, 2011, the Commission issued D.11-12-048 which authorized PG&E to operate Line 101, 132A, and 147 at pressure no higher than 365 psig. In that Decision, the Commission found that PG&E had “developed a pipeline features list (PFL) showing each component and its characteristics, and completed MAOP validation for all pipelines and associated components.”<sup>1</sup> At the evidentiary hearing PG&E “presented its Vice President of Gas Transmission Maintenance and Construction to testify that PG&E’s engineers had validated the engineering and construction through records review of piping and all associated components.”<sup>2</sup>

In evaluating PG&E’s presentation, the Commission relied on the standards it adopted in D.11-09-006, which required, among other things, that PG&E have a responsible engineer review the pipeline construction and assess the pressure test results to ensure safe operations. The Commission found that PG&E stated that its MAOP validation process began with “a pipeline features list showing each component of the pipeline facilities . . . , based on design plans, as-built drawings, purchase orders, pressure test records, coating information as well as other available documents.”<sup>3</sup> Based on the PFL, PG&E then established the maximum pressure for each feature. The Commission concluded that PG&E had demonstrated that Lines 101, 132A, and 147 could be safely operated at a

---

<sup>1</sup> D.11-12-048 at 4.

<sup>2</sup> *Id.* at 5.

<sup>3</sup> *Id.* at 7.

MOP of 365 psig.

On July 3, 2013, PG&E, presented for filing with the Commission a document entitled "Errata to Pacific Gas and Electric Company's Supporting Documentation for Lifting Operating Pressure Restrictions on Line 101 and 147."

That document stated that the supporting information PG&E filed with the Commission on October 31, 2011, to justify its request to lift operating pressure restrictions on Line 147 and 101 contained errors. In its July 2013 document, PG&E revealed it had subsequently discovered that some sections of Line 147 pipeline actually had Single Submerged Arc Welds, to which PG&E's standards apply a joint efficiency factor of 0.8. The lower joint efficiency factor reduced the pipeline's MAOP from 365 psig, as approved in D.11-12-048, to 330 psig.

On August 19, 2013, the assigned Commissioner and Administrative Law Judge (ALJ) issued their Ruling Directing Pacific Gas and Electric Company to appear and Show Cause Why All Commission Decisions Authorizing Increased Operating Pressure Should Not Be Stayed Pending Demonstration that Records Are Reliable. The ruling required PG&E to file and serve no later than August 30, 2013, a verified statement of its Vice President of Gas Transmission Maintenance and Construction setting forth the exact events, with dates, which revealed PG&E's errors on Line 147, and its subsequent actions. PG&E was also directed to appear in a Commission hearing on September 6, 2013, where other parties were allowed to cross examine PG&E's Vice President and any other witnesses.

PG&E filed and served the document as required, and cross examination occurred on September 6, 2013, and was continued until December 16, 2013. Opening briefs were filed and served on January 17, 2014, and reply briefs on January 31, 2014. With the filing of reply briefs, the matter was submitted for

Commission consideration.

PG&E reduced the operating pressure on Line 147 to 300 psig and in October 2013 reduced it further to 125 psig.

While this matter was pending, the Commission opened a review of its 2011 decision to lift the operating pressure restrictions on Line 147, and recertified Line 147 with a MAOP of 330 psig in D.13-12-0420.

### **2.1. The Procedural Part of the Order to Show Cause (OSC)**

On December 19, 2013, the Commission issued D.13-12-053 which found that PG&E had violated Rule 1.1 of the Commission's Rules of Practice and Procedure by not correcting promptly a material misstatement of fact in a pleading filed with the Commission and by mischaracterizing the correction submitted for filing on July 3, 2013 as a routine and non-substantive correction, and fined PG&E \$14,350,000 for its violations.

Specifically, the Commission explained that on October 31, 2011 and November 15, 2011, PG&E filed Supporting Information to justify its request to lift operating pressure restrictions on Lines 147 and 101. Ordering paragraph 1 of D.11-12-048 relied on PG&E's supporting information in approving an increase in MAOP to 365 psig. PG&E became aware of record discrepancies for Line 147 beginning on October 18, 2012. On July 3, 2013, PG&E submitted for filing an "Errata" document stating that the October 31, 2011 and November 15, 2011 Supporting Information contained errors and that, as a result, PG&E had reduced the MAOP to 330 psig.

In that decision, the Commission found that the errors PG&E discovered included pipeline incorrectly recorded as seamless, a fact pattern distressingly similar to the facts of the San Bruno tragedy, and that it was not credible that PG&E's engineers and executives did not recognize the provocative nature of

these facts in light of the intense public interest in natural gas pipeline safety. The Commission determined that while the errors were swiftly investigated and reported to management by engineers in the field, PG&E did not, in turn, expeditiously disclose this information to this Commission or to local safety authorities. The Commission held that since PG&E became aware of record discrepancies beginning on October 18, 2012, it should have prepared and submitted a filing to inform the Commission of this significant and material discovery no later than November 16, 2012. The Commission's fine tabulations were based on that timetable.

The issue remaining in this proceeding is whether the Commission's decisions lifting pressure limitations for Lines 131-30, D.12-09-003, Lines 101 and 132A, D.11-12-048, and the Topock Compressor Station, D.11-10-010, should be stayed pending a demonstration by PG&E that their natural gas pipeline records are reliable.

## **2.2. Positions of the Parties**

### **2.2.1. Office of Ratepayer Advocates (ORA)**

ORA presented a series of recommendations to the Commission:

1. PG&E should be required to support its Safety Certifications with information that is accurate, verifiable, and complete, including as-built drawings where appropriate, and explain any contradictory information.
2. Any hydrotest used to support a requested MAOP must be performed to the standards set by applicable federal regulations, show that all of the line was tested, and address any post-test new information that may impact the proper MAOP for the line.



3. All MAOP calculations must be consistent with Subpart L of the minimum federal safety standards codified at 49 CFR Part 192.
4. All Safety Certifications, including the supporting information, should be made part of the record in this proceeding, and any future pressure restoration proceedings.

### **2.2.2. The Utility Reform Network (TURN)**

TURN explained that based on the revelation that PG&E's supposedly validated pipeline features documentation for several segments of Line 147 reflected incorrect and overly aggressive assumptions, the Commission appropriately asked whether PG&E's records were reliable. TURN argued that contrary to PG&E's September 6, 2013 testimony claiming that the Commission has no reason to be concerned about the reliability of PG&E's PFL, the record of this proceeding showed that:

- (1) PG&E discovered all of the Line 147 errors by happenstance, not as a result quality control or quality assurance efforts;
- (2) errors of the type that PG&E discovered undermine safety by allowing excessive operating pressures and preventing the correct targeting of risk mitigation efforts in Integrity Management and the Pipeline Safety Enhancement Program ("PSEP"); and
- (3) PG&E's own analysis shows that many more similarly consequential errors may be lurking undetected in PG&E's PFL.

Although TURN concluded that PG&E had failed to demonstrate that its pipeline features records are sufficiently reliable to promote the safe operation of PG&E's gas transmission system, TURN did not recommend any further reductions to the reduced operating pressures that PG&E had already implemented for Lines 101, 147 and 132A. To address the ongoing reliability problems with

PG&E's records, TURN supported a Commission order that PG&E's shareholders fund a thorough and independent third-party review of the reliability of PG&E's documented pipeline specifications.

### **2.2.3. City of San Bruno**

The City of San Bruno argued that PG&E's MAOP of Line 147 was based on incorrect assumptions, and that PG&E was operating Line 147 based upon assumptions concerning the strength of the pipe, its welds, design and fabrication, inconsistent with actual field survey, or "as built information." Moreover, PG&E's error rate of between .3% and 1.5% in a 14,309 features data set which was randomly sampled contained Type 5 errors, which are consequential errors that would reduce a pipeline's MOAP, reinforces the City of San Bruno's concern that PG&E does not have accurate records as to what is in the ground. The City of San Bruno dismissed PG&E's effort to rely upon hydrotesting in lieu of verifiable, traceable, and accurate records, and opposed PG&E's conclusion that if it does not know what is in the ground, then a hydrotest is a suitable substitute. The City of San Bruno concluded that a proper hydrotest does not diminish the value of, and need for, accurate and complete records. The City of San Bruno asked the Commission to rescind all decisions authorizing pressure test increases, and appoint an independent monitor to review and determine when PG&E's records are complete, accurate, and reliable.

### **2.2.4. City and County of San Francisco**

The City and County of San Francisco argued that the record contained ample evidence that PG&E's records are unreliable system-wide, with discrepancies that raise significant and broad safety issues that must be addressed. The City and County of San Francisco supported recommendations made by TURN and San Bruno for an independent monitor.

**2.2.5. PG&E**

On August 30, 2013, PG&E filed and served the verified statement of the Vice President of Gas Transmission Maintenance and Construction. The statement explained that in late 2012 PG&E discovered errors in its October 31, 2011, filing on which the Commission relied in issuing D.11-12-048, the decision lifting operating pressure restrictions on Lines 101, 132A, and 147. Specifically, PG&E found errors in its pipe specifications for four segments of Line 147. When those errors are corrected in the pipeline features analysis, the resulting MAOP decreases from the 365 psig authorized in D.11-12-048 to 330 psig. For Line 101, PG&E concluded that its interpretation of federal pipeline regulations should be corrected to exclude a 1989 pressure test and also reduces the MAOP to 330 psig.

At the September 6, 2013, hearing, PG&E also presented its Senior Director of Asset Knowledge Management who described PG&E's gas records verification and management programs. The Senior Director explained that in 2011, pursuant to directives from the National Transportation Safety Board (NTSB) and this Commission, PG&E embarked on a massive document review process to obtain traceable, verifiable, and complete records to validate the MAOP of its natural gas transmission pipelines. The Senior Director stated that PG&E completed the validation of its High Consequence Area pipeline in January 2012 and has continued to improve and review its records. As part of a leak repair in October of 2012, PG&E's technicians noticed a discrepancy between the records and the pipeline found in the field. The Senior Director explained that this information was provided to the records review personnel who investigated and determined that three segments of Line 147 had incorrect pipeline features. The Senior Director described this process as "find it and fix it," which PG&E has

used to improve its gas system record management.<sup>4</sup>

In its brief, PG&E concluded that the Commission issued this OSC following the discovery of an error in the PFL for Line 147. After a proceeding lasting four months, including four days of evidentiary hearings, an informal workshop, hundreds of discovery requests, and PG&E's thorough review of pipeline records for the other Lines, no record discrepancy has been found other than those PG&E identified on Line 147. Confidence in PG&E's pipeline records is further bolstered by enhanced quality control and quality assurance processes in PG&E's MAOP Validation effort, PG&E contended.

PG&E explained that this OSC has a single focus: whether the Commission should suspend pressure restoration orders on four natural gas transmission lines and one section of station piping due to the Line 147 record discrepancies identified by PG&E. The PFL for Line 147 was one of the earliest completed. PG&E stated that enhanced quality control and quality assurance measures reduced the error rate to less than one percent. PG&E noted that its recent re-review of the MAOP validation records for all the lines subject to pressure restoration orders and found no other errors, and no party presented evidence of any other error in PG&E's MAOP or other records for the pressure restoration orders. PG&E concluded that the record did not support an order of the Commission suspending its pressure restoration orders.

### **3. Discussion**

Pursuant to Public Utilities Code Section 451 each public utility in California must:

---

<sup>4</sup> Hearing Transcript at 2448.

Furnish and maintain such adequate, efficient, just and reasonable service, instrumentalities, equipment and facilities, ...as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.

The duty to furnish and maintain safe equipment and facilities falls squarely on California public utilities, including PG&E. The burden of proving that particular facilities are safe also rests with PG&E.

As set forth below, we find that PG&E has made great strides to improve its natural gas system records management from the time we began this proceeding, but that an on-going commitment to continuous improvement is needed to identify and correct remaining errors. Due in part to the lack of 100% reliable records, this Commission in D.11-06-017 ordered all California natural gas utilities to pressure test or replace all natural gas pipeline. As required by D.11-09-006, PG&E has submitted valid and verified pressure test results in support of its requests to lift maximum operating pressure limitations for Lines 131-30, Lines 101 and 132A, and the Topock Compressor Station. No party has presented a factual basis for staying D.11-10-010, D.12-09-003, and D.11-12-048. We, therefore, decline to stay these decisions.

As noted by the assigned Commissioner and ALJ in the ruling initiating this OSC, the issue of accurate natural gas transmission system records has dominated this proceeding since the Commission issued this Order Instituting Rulemaking in February 2011.

In its Pipeline Safety Enhancement Plan, PG&E presented its Records Integration Program for the document collection, review and verification process underway since the January 3, 2011, pursuant to the NTSB directives. PG&E included its new electronic records management system called the Gas Transmission Asset Management Project. There, PG&E stated that it would enter

critical pipeline information into its existing Geographic Information System from source documentation, validate the piping systems information, and upgrade the system to allow users to access supporting original source records. The Commission approved PG&E's plan in D.12-12-030.

On September 6, 2013, PG&E's executive in charge of the Asset Management Program testified that PG&E did not "just set up the process and walk away from it."<sup>5</sup> PG&E implemented quality control and quality assurance to continuously improve its process for gas transmission system records. The executive explained that PG&E improved the engineering analysis step in its validation process with automated assumptions and engineering data validation tools. These tools, and an independent audit team, ensure quality assurance and control with a peer engineer review.<sup>6</sup> Most importantly, the executive explained that PG&E has adopted a "find it and fix it" culture that identifies issues with implications for the system and implements solutions.<sup>7</sup>

The procedural means by which PG&E chose to inform this Commission and the parties of newly discovered inaccurate records and needed corrections, and the ensuing controversy, led to intense skepticism regarding the underlying facts. The parties and the Commission subjected PG&E to a well-deserved rigorous and thorough review of the entire process by which the errors were discovered and evaluated, and PG&E's recordkeeping improvement program generally. PG&E received and responded to hundreds of data requests, hosted an impromptu all-day workshop at its offices where its subject matter experts

---

<sup>5</sup> Hearing Transcript at 2461.

<sup>6</sup> Hearing Transcript at 2461 – 2463.

<sup>7</sup> *Id.* at 2569.

and senior staff explained details from the filing, and the parties challenged PG&E's witnesses during days of cross examination.

The end result is that we have confirmed what we found three years ago – PG&E has decades-old natural gas transmission pipelines with less than perfect documentation of what is in the ground and that this situation poses continuing safety concerns. Moreover, even with available records, there is no way to know what one does not know because of the absence of any particular records. Under these circumstances, strength testing these pipelines to very high pressures reasonably supports their established maximum operating pressure, and going forward, provides a significant margin of safety. Nationwide, strength testing of pipelines to very high pressures is the best practice adopted by the industry and reflected in long-standing regulations. From the NTSB's letter of January 3, 2011, to the outside expert's testimony on November 20, 2013, strength testing has been uniformly the recommendation. Strength testing or replacement is what the Commission ordered in D.11-06-017, and that is what the Commission required for all the pressure restoration orders, in addition to continuous improvement of pipeline records. No party has presented information suggesting that Lines 131-30, Lines 101 and 132A, and the Topock Compressor Station have not, in fact, been subjected to a valid pressure test in accord with current state and federal regulations. Accordingly, the record presents us with no basis on which to stay the decisions' findings that such pressure tests have been performed. We, therefore, conclude that good cause has not been shown to stay the implementation of D.11-10-010, D.12-09-003, and D.11-12-048.

As we discussed in D.12-12-030, the unique features of the natural gas transmission system mandate the highest commitment to safety by PG&E:

Among all public utility facilities, natural gas transmission and distribution pipelines present the greatest public safety challenges.

Unlike more common public utility facilities, gas pipelines carry flammable gas under pressure - in transmission lines, often at high pressure - and these pipelines are typically located in public right-of-ways, at times in densely populated areas. The dimensions of the threat to public safety from natural gas pipeline systems, including the pace at which death and life-altering injuries can occur, are far more extreme than other public utility systems. This unique feature requires that natural gas system operators and this Commission assume a different perspective when considering natural gas system operations. This perspective must include a planning horizon commensurate with that of the pipelines; that is, in perpetuity, as well as an immediate awareness of the extreme public safety consequences of neglecting safe system construction and operation.<sup>8</sup>

In that decision, this Commission also vowed to engage in the necessary oversight to ensure that PG&E meets its obligation to safe operations:

This is why today's decision must be only the beginning of a permanent change in operations, attitude, and perspective, for both PG&E and this Commission. Institutionalizing the needed change will require permanent operational and functional changes. For the future, we must ensure that safety remains PG&E's top priority.<sup>9</sup>

We remain resolute in our commitment to bringing PG&E to the level of organization and forward-thinking safety management necessary to meet the standards for safe natural gas transmission system operations required for California's residents and businesses. Our on-going oversight and supervision of PG&E is designed to ensure that we meet this obligation. For this reason, we decline as unnecessary the request of several parties that we appoint a third-party to also review PG&E's operations.

---

<sup>8</sup> D.12-12-030, *mimeo* at 42.

<sup>9</sup> *Id.*



This portion of the rulemaking should be closed.

#### **4. Comments on Proposed Decision**

The proposed decision of the ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Opening comments were filed on May 15, 2014, by ORA and the City of San Bruno. Reply comments were filed on May 20, 2014, by TURN and PG&E.

ORA and the City of San Bruno argued that PG&E had failed to present verifiable evidence that it correctly calculated the maximum operating pressure for the Commission's 2011 and 2012 pressure restoration decisions, the objective of this OSC proceeding.<sup>10</sup> ORA concluded that audits and/or the appointment of an independent monitor were necessary to address PG&E's continuing recordkeeping problems, and that the decision committed factual and legal error by determining that a pressure test is dispositive of calculating maximum operating pressure.

The City of San Bruno argued that proper recordkeeping comes first before PG&E can defer to pressure tests because a mere pressure test will not tell PG&E whether a subject pipe should be considered "vintage" and requires replacement.<sup>11</sup> The City of San Bruno also renewed its, and other parties', call for the Commission to appoint an independent third-party review to ascertain the reliability of PG&E's documentation of pipeline data and specifications.

In its reply comments, TURN sought a more balanced discussion of the issues and a tone that will encourage intervenors to maintain a long-term

---

<sup>10</sup> ORA Opening Comments at 3 - 4.

commitment to scrutinize the safety of PG&E's operations.<sup>12</sup> PG&E restated its arguments that its calculations are correct and conservative.

In response to the comments, the ALJ revised the discussion section of the proposed decision to adjust the tone and address the omitted issue, which did not alter the substantive outcome. The Commission adopts the ALJ's proposed decision as so revised and presented herein.

## **5. Assignment of Proceeding**

Michel Peter Florio is the assigned Commissioner and Maribeth A. Bushey is the assigned ALJ in this proceeding.

## **Findings of Fact**

1. PG&E does not possess traceable, verifiable, and complete records of each of pipeline segment and fitting in its natural gas transmission and distribution system.

2. As part of its PSEP, PG&E is implementing its Pipeline Records Integration Program, which includes the Gas Transmission Asset Management Project, an improved electronic records system.

3. PG&E is continuously reviewing and improving the reliability of its natural gas transmission recordkeeping programs, and the Commission is closely supervising this on-going effort.

4. No party presented evidence that PG&E had not pressure tested Lines 131-30, Lines 101 and 132A, and the suction side of the Topock Compressor Station.

---

<sup>11</sup> City of San Bruno Opening Comments at 3.

<sup>12</sup> TURN Reply Comments at 3 – 4.

**Conclusions of Law**

1. PG&E complied with the Supporting Information requirements of D.11-09-006 in its presentations that led to D.11-10-010, D.12-09-003, and D.11-12-048.
2. No party presented evidence to support a finding of good cause to stay D.11-10-010, D.12-09-003, and D.11-12-048.
3. D.11-10-010, D.12-09-003, and D.11-12-048 should not be stayed.
4. This portion of Rulemaking 11-02-019 should be closed.
5. This decision should be effective immediately.

**O R D E R**

**IT IS ORDERED** that:

1. Pacific Gas and Electric Company (PG&E) must operate Lines 131-30, Lines 101 and 132A, and the suction side of the Topock Compressor Station in accord with applicable state and federal law and regulations. Should such law and regulations require a decreased maximum operating pressure, PG&E shall provide written notice to the parties to this proceeding within 30 days.
2. This portion of this proceeding is closed, and Rulemaking 11-02-019 remains open.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.